

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION

INNOVATIVE GLOBAL SYSTEMS LLC,

Plaintiff,

v.

CIVIL ACTION NO. 6:09-cv-00157

TURNPIKE GLOBAL TECHNOLOGIES  
L.L.C., CADEC GLOBAL, INC., XATA  
CORPORATION, GE ASSET  
INTELLIGENCE, LLC and  
NETWORKFLEET, INC.

**JURY TRIAL DEMANDED**

Defendants.

**PLAINTIFF IGS' OPENING BRIEF REGARDING  
CLAIM CONSTRUCTION ISSUES PURSUANT TO PATENT RULE 4-5(a)**

Keith A. Rutherford  
State Bar No. 17452000  
R. Scott Reese  
Texas State Bar No. 24046696  
WONG, CABELLO, LUTSCH,  
RUTHERFORD & BRUCCULERI L.L.P.  
20333 S.H. 249, Suite 600  
Houston, Texas 77070  
Telephone: (832) 446-2425  
Facsimile: (832) 446-2424  
E-Mail: krutherford@counselip.com  
E-Mail: sreese@counselip.com

Michael T. Cooke  
State Bar No. 04759650  
Jonathan T. Suder  
State Bar No. 19463350  
FRIEDMAN, SUDER & COOKE  
Tindall Square Warehouse No. 1  
604 East 4th Street, Suite 200  
Fort Worth, Texas 76102  
(817) 334-0400  
Fax (817) 334-0401  
E-Mail: jts@fsclaw.com  
E-Mail: mtc@fsclaw.com

Eric M. Albritton  
Eric M. Albritton, P.C.  
P.O. Box 2649  
111 West Tyler Street  
Longview, TX 75601  
(903) 757-8449 x204  
Fax (903) 758-7397  
E-Mail: ema@emafirm.com

ATTORNEYS FOR PLAINTIFF  
IGS

## TABLE OF CONTENTS

<b>I.</b>	<b>BACKGROUND AND NATURE OF CASE.....</b>	<b>1</b>
<b>II.</b>	<b>THE PATENTS-IN-SUIT .....</b>	<b>1</b>
<b>III.</b>	<b>LEGAL PRINCIPLES GOVERNING CLAIM INTERPRETATION .....</b>	<b>6</b>
A.	Markman Proceedings .....	6
B.	Law of Claim Construction.....	7
C.	Construction of “Means-Plus-Function” Limitations .....	9
<b>IV.</b>	<b>CLAIM TERMS SUBJECT TO INTERPRETATION .....</b>	<b>10</b>
A.	“data” ['203 Patent (Claims 1,8,11,24); ‘554 Patent (Claims 1, 11, 24); ‘352 (Claims 11, 55), ‘800 Patent (Claims 1, 12, 25), ‘993 Patent (Claim 1 and throughout)] .....	10
B.	“ <i>first data communications protocol</i> ” ['203 Patent (Claims 1,6,11), ‘554 Patent (Claims 1,6,11), ‘352 Patent (Claim 11, 55), ‘800 Patent (Claims 1,10,12), ‘993 Patent (1,7,8,15,20)] AND “ <i>first vehicle data communications protocol</i> ” ['203 Patent (Claim 24), ‘554 Patent (Claim 24), ‘352 Patent (Claim 55), ‘800 Patent (Claim 25), ‘993 Patent (Claims 15,20)] .....	12
C.	“ <i>second data communications protocol</i> ” ['554 Patent (Claims 1,11,12,24,25), ‘352 Patent (Claims 11,55,56), ‘993 Patent (Claims 1,5,8,12,15,19)] AND “ <i>second RF communication protocol</i> ” ['203 Patent (Claims 1,11,12,24,25), ‘554 Patent (Claim 29), ‘800 Patent (Claims 1,12,13,25,26)] AND “ <i>wireless data communications protocol</i> ” ['993 Patent (Claims 5,12, 19)] .....	15
D.	“ <i>vehicle data communications protocol converter</i> ” ['554 Patent (Claim 11), ‘352 Patent (Claim 11), ‘993 Patent (Claims 1,8)].....	18
E.	“ <i>vehicle data communications protocol converting means</i> ” ['203 Patent (Claims 1, 11), ‘554 Patent (Claim 1), ‘800 Patent (Claims 1,12)].....	20
F.	“ <i>convert/converting</i> ” ['203 Patent (Claims 1, 11, 24), ‘554 Patent (Claims 1, 11, 24), ‘352 Patent (Claims 11, 55), ‘800 Patent (Claims 1, 12, 25), ‘993 Patent (Claims 1, 8, 15)] .....	22
G.	“ <i>transceiver</i> ” ['203 Patent (Claims 1,11), ‘554 Patent (Claims 1,11, 12), ‘800 Patent (Claim 1,12), ‘352 Patent (Claim 11)] .....	24
H.	“ <i>remote data communications terminal</i> ” ['203 Patent (Claims 1,11,12,24,25), ‘554 Patent (Claims 1,11,12,24,25), ‘352 Patent (Claims 11,55,56)].....	26

I.	<i>“connected [to]”</i> [‘203 Patent (Claims 1,8,11,12,24), ‘554 Patent (Claims 1,7,8,11,12,14), ‘352 Patent (Claims 12,17), ‘800 Patent (Claims 1,11,12,13,15), ‘993 Patent (Claims 1, 2, 8, 9)].....	27
J.	<i>“operatively connect[ed][ing]”</i> [‘993 Patent (Claims 2,9,16)] .....	30
K.	<i>“connector”</i> [‘203 Patent (Claim 1 and throughout), ‘554 Patent (Claim 1 and throughout), ‘352 Patent (Claim 12), ‘800 Patent (Claim 1 and throughout)] .....	30
L.	<i>“means connected to said vehicle data communications protocol converter for transmitting the second data communications protocol from said vehicle, and for receiving the second data communications protocol from a remote data communications terminal”</i> [‘993 Patent (Claims 1, 8)].....	31
M.	<i>“heavy duty vehicle”</i> [‘203 Patent (Claims 1, 24), ‘352 Patent (Claim 17), ‘800 Patent (Claim1)] .....	33
N.	<i>“a vehicle data communications protocol converter connected to said plurality of electrical conductors”</i> [‘554 Patent (Claim 11), ‘993 Patent (Claims 1, 8, 11), ‘352 Patent (Claim 1, 11)] .....	34
<b>V.</b>	<b>CONCLUSION .....</b>	<b>36</b>

## TABLE OF AUTHORITIES

### Cases

<i>Bell Communications Research v. Vitalink Communications Corp.</i> , 55 F.3d 615 (Fed. Cir. 1995) ....	7
<i>Budde v. Harley-Davidson, Inc.</i> , 250 F.3d at 1369 (Fed. Cir. 2001) ....	20
<i>Cole v. Kimberly-Clark Corp.</i> , 102 F.3d 524 (Fed. Cir. 1996) ....	9
<i>Digital Biometrics v. Identix, Inc.</i> , 149 F.3d 1335 (Fed. Cir. 1998) ....	8
<i>Embrex, Inc. v. Service Eng'g Corp.</i> , 216 F.3d 1343 (Fed. Cir. 2000) ....	7
<i>Glaxo Inc. v. Novopharm Ltd.</i> , 110 F.3d 1562 (Fed. Cir. 1997) ....	7
<i>Greenberg v. Ethicon Endo-Surgery, Inc.</i> , 91 F.3d 1580, (Fed. Cir. 1996) ....	34
<i>Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.</i> , 222 F.3d 951 (Fed. Cir. 2000) ....	8
<i>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</i> , 381 F.3d 1111 (Fed. Cir. 2004) ....	30
<i>Interactive Gift Express, Inc. v. Compuserve, Inc.</i> , 256 F.3d 1323 (Fed. Cir. 2001) ....	7
<i>Jonsson v. Stanley Works</i> , 903 F.2d 812 (Fed. Cir. 1990) ....	9
<i>Laitram Corp. v. Morehouse Indus. Inc.</i> , 143 F.3d 1456 (Fed. Cir. 1998) ....	6, 9
<i>Liebel-Flarsheim v. Medrad, Inc.</i> , 358 F.3d 898 (Fed. Cir. 2004) ....	8
<i>Markman v. Westview Instruments, Inc.</i> , 52 F.3d 967 (Fed. Cir. 1995) ( <i>en banc</i> ), <i>aff'd</i> , 517 U.S. 370 (1996) ....	6, 7, 8, 34
<i>Odetics, Inc. v. Storage Tech. Corp.</i> , 185 F.3d 1259 (Fed. Cir. 1999) ....	9
<i>Personalized Media Communications, LLC v. Int'l Trade Com'n</i> , 161 F.3d 696 (Fed. Cir. 1998) ....	9, 34, 35
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) ( <i>en banc</i> ) ....	6, 7, 8
<i>Renishaw PLC v. Marposs Societa' per Azioni</i> ,	

158 F.3d 1243 (Fed. Cir. 1998) .....	8
<i>Sta-Rite Industries v. ITT Corp.</i> , 6:08 CV 59 (E.D. Tex January 19, 2010) .....	7
<i>U.S. Surgical Corp. v. Ethicon, Inc.</i> , 103 F.3d 1554 (Fed. Cir. 1997) .....	6
<i>Vitronics Corp. v. Conceptronic, Inc.</i> , 90 F.3d 1576 (Fed. Cir. 1996) .....	7
<i>Vulcan Eng'g Co. v. FATA Aluminium, Inc.</i> , 278 F.3d 1366 (Fed. Cir. 2002) .....	32
<b>Statutes</b>	
35 U.S.C. § 112, ¶ 6.....	9, 20, 31, 32, 34, 35
<b>Rules</b>	
40 C.F.R. § 86.082-2.....	34

**EXHIBITS**

**Exhibit A** .....Joint Claim Construction Chart

**Exhibit B** .....U.S. Patent No. 6,411,203

**Exhibit C** .....U.S. Patent No. 6,608,554

**Exhibit D** .....U.S. Patent No. 6,744,352

**Exhibit E** .....U.S. Patent No. 7,015,800

**Exhibit F** .....U.S. Patent No. 7,449,993

**Exhibit G** .....U.S. Patent No. 6,111,524

**Exhibit H** .....U.S. Patent No. 6,064,299

**Exhibit I** .....SAE J1939 Standards

**Exhibit J** .....Office Action Response dated November 12, 1999

**Exhibit K** .....Office Action dated October 4, 1999

**Exhibit L** .....Notice of Allowance

**Exhibit M** .....Webster's Ninth New Collegiate Dictionary

**Exhibit N** .....Webster's New Unabridged Dictionary

**Exhibit O** .....Surface Vehicle Recommended Practice Guide

## **I. BACKGROUND AND NATURE OF CASE**

Attached as Exhibit A is the parties' Joint Claim Construction Statement ("Joint Statement") prepared in accordance with this Court's Patent Rule 4-3. Each of the disputed limitations in each of the patents is discussed in this brief.

As also set forth in the Joint Statement, all parties believe that the hearing to address the disputed claim terms can be conducted in less than one day, and with no live witnesses.

## **II. THE PATENTS-IN-SUIT**

The inventor and majority owner of Innovative Global Systems LLC ("IGS"), Alan Lesesky, has been involved in the research, development and design of electrical and mechanical products for motor vehicles for over 40 years. He has worked for a number of years for notable industry players such as Freightliner, White Motor, and Bendix. Mr. Lesesky is well known in the industry, having been an officer of and having received awards from a number of industry groups. Mr. Lesesky and IGS continue product development today, working with a number of industry partners.

The inventions of Mr. Lesesky at issue in this suit are, generally speaking, in a field called "telematics," which refers to the combination of telecommunications and information. More specifically, each of the five asserted patents—U.S. Patent Nos. 6,411,203 ("the '203 Patent), 6,608,554 ("the '554 Patent), 6,744,352 ("the '352 Patent), 7,015,800 ("the '800 Patent), and 7,449,993 ("the '933 Patent) (collectively "the Asserted Patents")<sup>1</sup>—are directed to methods and devices for transmitting and receiving operational information about a vehicle.<sup>2</sup> The information is transmitted/received between the vehicle and a remote location, providing a fleet manager, for example, with up-to-date information about the operation of the vehicles in the field. The fleet

---

<sup>1</sup> The Asserted Patents are attached as Exhibits B-F.

<sup>2</sup> NetworkFleet has asserted counterclaims of non-infringement and invalidity against two additional IGS patents, U.S. Patent No. 6,111,524 (the '524 Patent) and U.S. Patent No. 6,064,299 (the '299 Patent) (collectively the NF Counterclaim Patents). The NF Counterclaim Patents are in the same patent family as the Asserted Patents, and are

manager can see information about how the vehicle and the operator are behaving in the field--information such as engine and other system fault codes, sudden stops and/or accelerations, speed, rpms, reefer (refrigerated trailer) parameters, and the like. The fleet manager can use this information to monitor and plan for vehicle maintenance, prevent break downs, monitor and modify driver performance, save fuel costs, and prevent accidents. The remote location can also send information to the vehicle to affect an operational characteristic of a system on the vehicle, such as adjusting a vehicle system parameter, or updating/upgrading software of a system.

Modern vehicles include a variety of sensors and electronic systems that communicate on the vehicle via electrical conductors, for example wires that make up the J1708 databus on a truck.<sup>3</sup>. This combination of sensors and electronic systems may be referred to as a diagnostic system and is familiar to anyone who has taken their car to a mechanic and watched the mechanic use a cable to connect a computer to the car's diagnostic system to figure out what is wrong. The mechanic might also use this data link to reset or adjust the ailing system of the car. The vehicle's data bus also provides some of the information from the sensors and electronic systems to gauges and warning lights on the dashboard of the car, such as the speedometer, tachometer, temperature gauge, check engine light or tire pressure.

The Asserted Patents describe communications devices that in their simplest form replace the cable connecting the mechanic's computer with a wireless data link to a remote location. The Asserted Patents disclose and claim systems that can send vehicle data over great distances. This allows a person at the remote location to access some or all of the information the mechanic would see and also the information that would be displayed on a control panel in the vehicle. The

---

directed to similar subject matter. The NF Counterclaim Patents are attached as Exhibits G and H.

<sup>3</sup> Over time the transportation industry has developed standardized data buses that allow subsystems and sensors on the truck and/or trailer to communicate with each other and with centralized devices on the truck such as an electronics control module (ECM). These standards in typical 18 wheeler trucks are J1708 and J1939. In lighter

inventions claimed in the Asserted Patents allow the person at the remote location to access information from many vehicles simultaneously while these vehicles are actually in operation. No longer does a truck have to pull into a service bay and have a mechanic connect physically to the diagnostic system. The wireless data link is a radio frequency (RF) data link and may be implemented via a cellular phone network, a satellite data link, or a combination of both. The communications device on the vehicle includes a transceiver to transmit wireless information to the remote location and receive wireless information from the remote location.

But, the solution described in the Asserted Patents is more than simply substituting a wireless transceiver for the cable connecting a vehicle to the mechanic's computer. In the case of the physical connection to the mechanic's computer, the computer and the vehicle diagnostic system already speak the same language. In other words, the information on the vehicle's data bus is already encoded in a format that the mechanic's computer understands because industry standards specify such formats, referred to as protocols, *e.g.*, the J1708 bus transmits data in a J1587 format. Likewise, the mechanic is actually plugging into the diagnostic system, so the physical mode of transmission, across wires, remains the same as well. The physical form of transmission is also part of the protocol. Before information can be wirelessly exchanged between the vehicle data bus and a remote terminal, the vehicle information must be re-encoded into at least a physical protocol suitable for wireless communication, and possibly a different data format that can be understood by the receiving system. This process of re-encoding the data is called protocol conversion.

A simplistic example is like the old movies where the Colonel gives a verbal order and a telegraph operator sends that order in Morse code to a far site. The Colonel's spoken order is transmitted to the operator wirelessly using sound frequencies (the physical portion) and the

---

trucks and passenger vehicles those standards include OBD II (On Board Diagnostics).

command is in English (the format portion). The order is sent by the operator on a wire with a series of electrical pulses (a different physical form) and the order is encoded in Morse code (a different format). So, the order is re-encoded in both a physical transport mechanism and in a format. Today's data communications are typically done in layered packets. The inner most layer may be the actual data in some format. Outer layers may be in some other format that is expected to be encountered on the packets' path, and outer layers deal with whether the signal will travel over wire, wirelessly, and if wirelessly, in what standard. Re-encoding such data can involve changing or replacing one or more of these encapsulated layers.

Vehicle data buses, such as J1708, J1939 and OBD II, use different standard protocols depending on the type of vehicle and when the vehicle was made.<sup>4</sup> These protocols define the various "layers" of communication. One layer is the physical layer, *i.e.*, the actual physical mechanisms of data transfer such as the number of wires, the number of pins used in connectors, etc. For example, the J1939 protocol defines a shielded twisted pair wire for data transfer and a standard 9-pin connector for connecting to the J1939 bus, as shown below:<sup>5</sup>



J1939 Off-Board Diagnostic Connector

Another layer might define how signals are formed. For example, digital signals are made up of 1's and 0's and a protocol layer might define that a +5 volt signal is a 1 and a 0 V signal is a zero. Still, other layers might define how messages are separated from one another (analogous to

<sup>4</sup> Exhibit I provides a brief overview of the layers of the J1939 protocol. IGS has produced numerous documents describing technical details of various vehicle protocols, but the detail of those documents is generally beyond the scope of this brief. *See* IGS011230-014669.

<sup>5</sup> *See* IGS008932-35, Exhibit I.

punctuation in written language), how messages are addressed to different entities on the bus, the actual ‘language’ that is spoken on the bus, or how entities keep their messages from conflicting with each other (analogous to saying “over” when speaking on a radio). Just like our examples above, protocol conversion can include re-encoding any or all of these layers.

The methods and devices described in the asserted patents include converting the information on the vehicle’s data bus from a protocol used on the data bus into a protocol suitable for wirelessly transmitting the information to a remote location using a wireless transceiver. Common wireless protocols include CDMA and GSM (*i.e.*, protocols used in cellular phone networks). Information received wirelessly at the vehicle from the remote location is re-encoded (*i.e.*, converted) from the wireless protocol into a protocol used on the vehicle.

The asserted patents describe two different embodiments of wireless communication between a vehicle and a remote location. According to one embodiment, the remote location is in close proximity to the vehicle, *i.e.*, within the ‘local area’ of the vehicle. According to this embodiment, the remote data terminal might be at a warehouse, fleet headquarters, fueling station, etc., and data can be transmitted and received when the vehicle is near one of these places. With this embodiment, the wireless transceiver can be a short-range RF transceiver or can even be an infrared (IR) transceiver, which requires a direct line of sight to the transceiver at the remote location (similar to the IR signal used in a television remote control). This short-range embodiment was claimed in the ‘299, which is an NF Counterclaim Patent, and is in the priority chain of the Asserted Patents. Claims of the ‘299 Patent specifically call out that the transceiver connected to the vehicle transmits and receives a “local-area data communications protocol.” *See, e.g.*, Exhibit H, ‘299 Patent, claim 11.

The Asserted Patents also talk about utilizing long distance RF communications such as satellite and cellular. This provides the advantage discussed above of being able to analyze

hundreds or thousands of trucks while they are in operation. The less time trucks spend in service bays, the more time trucks they spend hauling product, resulting in real dollars to fleet operators.

The claims of the Asserted Patents are not directed to local area communication, but instead are directed to data communication between a vehicle and a remote location, which allows communication when the vehicle is on the road. The asserted claims dropped the “local-area” data communications protocol limitations used in the earlier ‘299 patent and claim a broader data communications protocol.

### **III.    LEGAL PRINCIPLES GOVERNING CLAIM INTERPRETATION**

#### **A. Markman Proceedings**

In conducting claim construction proceedings, it is important to keep in mind the role of those proceedings in the overall adjudication of patent infringement. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*).

The goal in claim construction is to help the fact-finder, typically a lay jury, understand the claims. Following claim construction, the jury must determine – as a matter of fact – whether the claim as properly construed reads on the accused product or method. *Laitram Corp. v. Morehouse Indus. Inc.*, 143 F.3d 1456, 1461 (Fed. Cir. 1998).

Even though claim construction is a matter of law for the Court, the Court need not always render a construction of claim terms where such construction would not add clarity over and beyond the plain words used in the claim. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”).

## B. Law of Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *See Sta-Rite Industries v. ITT Corp.*, 6:08 CV 59 (E.D. Tex January 19, 2010) (memorandum opinion and order) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*)). The interpretation and construction of patent claims is a matter of law exclusively for the Court. *Markman*, 52 F.3d 967 at 970-971. Claim construction is the process of giving proper meaning to the claim language, and ultimately, defining the scope of protection. *Bell Communications Research v. Vitalink Communications Corp.*, 55 F.3d 615, 619 (Fed. Cir. 1995). The purpose of claim construction is to “understand and explain, but not to change, the scope of the claims.” *Embrex, Inc. v. Service Eng’g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000) (citations omitted).

“It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). In the event that the court is able to ascertain an unambiguous meaning of the claim term after examination of only the intrinsic evidence, claim construction is complete. *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1332 (Fed. Cir. 2001).

The Federal Circuit states that “proper construction of the claims is based upon the claim language, the specification, the prosecution history, and if necessary to aid the Court’s understanding of the patent, extrinsic evidence.” *Glaxo Inc. v. Novopharm Ltd.*, 110 F.3d 1562, 1565 (Fed. Cir. 1997).

The Court interprets the claims as used in the context of the specification to arrive at the most precise claim interpretation: “The construction that stays true to the claim language and most

naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

Throughout the process of claim construction, the Court aims to give patent claim terms their meaning as understood by one of ordinary skill in the art. *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 955 (Fed. Cir. 2000). The objective standard of one of ordinary skill in the art is measured at the time of the invention, *i.e.*, as of the effective filing date of the application. *Phillips*, 415 F.3d at 1313; *Markman*, 52 F.3d at 986.

As noted by the Federal Circuit, the respective roles of the claim language and the specification during the claim construction process are defined by the two canons which sometimes appear in tension, namely that "(a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation." *Renishaw*, 158 F.3d at 1248. The Federal Circuit, nevertheless, has repeatedly held that it is improper to import limitations from embodiments disclosed in the specification to limit or otherwise vary the meaning of the claim language. *Liebel-Flarsheim v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) "Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a ***clear intention to limit the claim scope*** using 'words or expressions of manifest exclusion or restriction.'" *Id.* at 906 (citation omitted and emphasis added).

When assessing claim construction, "[t]he prosecution history is relevant because it may contain contemporaneous exchanges between the patent applicant and the PTO about what the claims mean." *Digital Biometrics v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed. Cir. 1998). The prosecution history is the record of the proceedings in the PTO that involved the examination and ultimate issuance of the subject patent. Such proceedings can be relevant, because "arguments made during prosecution shed light on what the applicant meant by its various terms." *Laitram Corp. v.*

*Morehouse Indus., Inc.*, 143 F.3d 1456, 1462 (Fed. Cir. 1998). The prosecution history of one patent can be used to interpret the scope of the claims of a related patent. *See, e.g., Jonsson v. Stanley Works*, 903 F.2d 812 (Fed. Cir. 1990).

### **C. Construction of “Means-Plus-Function” Limitations**

Some of the claim limitations in the asserted patents are written in “means-plus-function” format. This is a special type of claim format in which the claim does not recite a definite structure (e.g., a “hammer”) but instead recites a non-specific structure for performing a claimed function (e.g., “means for driving a nail into a board”). *See Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996) (noting that a means-plus-function limitation does “not recite a definite structure which performs the described function.”). Claim limitations written in “means plus function” format are subject to a special rule of construction, which is set forth in the patent statute at § 112(6):

An element [i.e., limitation] in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6. In other words, “§ 112, ¶ 6 [of the patent statute] operates to restrict claim limitations drafted in . . . functional language to those structures, materials, or acts disclosed in the specification (and their equivalents) that perform the claimed function.” *Personalized Media Communications, LLC v. Int'l Trade Com'n*, 161 F.3d 696, 703 (Fed. Cir. 1998). Accordingly, if a claim limitation is written as “a means for driving a nail into a board,” one must consult the specification to see what corresponding structure is disclosed therein for performing the function of “driving a nail into a board.” If the corresponding structure in the specification is a hammer, then the claim limitation will be construed to cover the structure of a hammer and any structures that are equivalent thereto. *See, e.g., Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999).

#### **IV. CLAIM TERMS SUBJECT TO INTERPRETATION**

The inventions and claims in the Asserted Patents are specifically directed to telematics for vehicles and in some instances, more specifically trucks with tractors and trailers. These are precisely the types of products the Defendants make, use, and/or sell. This has left Defendants to attempt to turn common words such as “data” and “convert” into terms that somehow have requirements that do not even exist in the patents. Further, Defendants attempt to take limitations that appeared in the narrower claims of earlier patents in the family of the Asserted Patents and read those narrower limitations into broader claims that clearly do not refer to such limitations.

**A. “data” [‘203 Patent (Claims 1,8,11,24); ‘554 Patent (Claims 1, 11, 24); ‘352 (Claims 11, 55), ‘800 Patent (Claims 1, 12, 25), ‘993 Patent (Claim 1 and throughout)]**

IGS contends that “data” is properly construed as “information originating from or directed to a system of a vehicle and relating to operation, monitoring, or control of the system.” Defendants propose that this term be construed as “information collected from one or more vehicle electronic subsystems.” IGS’ proposed construction is the only construction consistent with the patent specifications and prosecution history. The Asserted Patents specifically discuss both sending data from the truck to a remote terminal and receiving data at the truck from the remote terminal. Through their proposed construction, Defendants want data to be only information collected on the truck. Therefore they intend to argue that unless the remote terminal sends the very same information collected from the truck back to the truck, the claim element of receiving data from the remote terminal will not be met. It is clear that the patent is not describing such a useless circle where the truck sends and then receives the very same data.

Both IGS and Defendants’ agree that data includes information from systems on the vehicle. But Defendants ignore the clear recitations in the specification of the Asserted Patents that data can also come from a remote source and be received at the vehicle. But, data can also originate from

other sources, such as from a remote location. *See, e.g.*, Exhibit B, the ‘203 Patent, col. 10, lines 45-47 (“The method can also include receiving the second data communications protocol from the remote data communications terminal 60.”). Claim 1 of the ‘203 Patent recites a remote data communications terminal including an RF transceiver for transmitting the second RF data communications protocol to the vehicle. Exhibit B, the ‘203 Patent, claim 1. So, the data can be directed *to* the vehicle system, as well as originating *from* the vehicle system. The specification discloses receiving data from a remote location when the data can be used to control data communication along the plurality of electrical conductors. Exhibit B, the ‘203 Patent, col. 10, lines 45-49.

The prosecution history of the asserted patents also makes clear that data communication between the vehicle and the remote terminal is two-way. For example, an Amendment dated November 12, 1999, in Patent Application No. 08/907,861 (the parent of the ‘203 Patent) states that the cited prior art “clearly fails to teach or suggest a two-way communications between the vehicle and a remote data communications terminal related to operating conditions of a vehicle.” *See* Exhibit J, Office Action, p. 12.

IGS’ proposed construction of the term “data” is also consistent with the specification and the file history with regards to the purpose of the information making up the data, namely, information relating to operation, monitoring, or control of the vehicle systems. For example, the specification states, “the present invention advantageously provides an apparatus and methods of data communication between a heavy duty vehicle and a remote data communication terminal so that various operating characteristics of the vehicle can be *monitored* or observed.” *See* Exhibit B, the ‘203 Patent, col. 2, lines 9-13 (emphasis added). Col. 5, lines 25-30 of the ‘203 Patent refers to exemplary electronic subsystems that can be “*controlled* and/or *monitored*” by the data communications device. *Id.* at col. 5, lines 25-30 (emphasis added). Thus, data includes information

relating to control and/or monitoring of a vehicle system. And as shown in the previous paragraph, the Amendment dated November 12, 1999, in Patent Application No. 08/907,861 states that the data is related to “*operating conditions* of a vehicle.” *See Exhibit J, Office Action, p. 12.* For more clarity, IGS therefore contends that the construction of data should specify that the information relates to operation, monitoring, or control of the vehicle system. Again, Defendants’ proposed construction only captures data collected from one or more vehicle subsystems and therefore ignores data coming from a remote location and having a “control” purpose, which is clearly disclosed in the specification. *See Exhibit B, the ‘203 Patent, col. 10, lines 45-49.*

Therefore, IGS urges the Court to reject Defendants’ proposed construction of “data” and adopt IGS’ proposed construction, “information originating from or directed to a system of a vehicle and relating to operation, monitoring, or control of the system.”

**B. “*first data communications protocol*” [‘203 Patent (Claims 1,6,11), ‘554 Patent (Claims 1,6,11), ‘352 Patent (Claim 11, 55), ‘800 Patent (Claims 1,10,12), ‘993 Patent (1,7,8,15,20)] AND “*first vehicle data communications protocol*” [‘203 Patent (Claim 24), ‘554 Patent (Claim 24), ‘352 Patent (Claim 55), ‘800 Patent (Claim 25), ‘993 Patent (Claims 15,20)]**

The parties have agreed that the terms “*first data communications protocol*” and “*first vehicle data communications protocol*” will be construed together. IGS contends that these terms are properly construed as “data encoded in a communication protocol associated with the vehicle, for example, J1708 or J1939.” Defendants propose the construction “a set of rules governing the treatment and format of communications to and from vehicle electronic subsystems.”

The below limitation of claim 11 of the ‘203 Patent provides an example of how these claim terms are used in the asserted claims:

11. An apparatus for data communications associated with a vehicle, the apparatus comprising:

\* \* \*

vehicle data communications protocol converting means connected to said plurality of electrical conductors for converting a

*first data communications protocol* associated with data communications along the plurality of electrical conductors to a *second RF data communications protocol*; and

an RF transceiver connected to said vehicle data communications protocol converting means for transmitting the *second RF data communications protocol* from the heavy duty vehicle and receiving the *second RF data communications protocol* from a remote data communications terminal not connected to the vehicle.

The clear function of the inventions is to take data that is encoded in one protocol (a first protocol) and convert it to data encoded in a second protocol so it can be transmitted wirelessly off the vehicle. Defendants are trying to force the claims into a nonsensical read to argue that the claimed invention does not transmit data off the truck but instead transmits, protocols (sets or rules) themselves— and, therefore, the converting is from one set of rules to another. There is no support for the idea of converting or transmitting sets of rules--protocols. The specifications of the asserted patents could not be clearer - *data encoded in protocols* is converted and transmitted. Claims are not read in a vacuum, but instead are read in light of the specification and prosecution history through the eyes of one of skill in the art. The Summary of the Invention in the '203 Patent starts off saying, “The present invention also advantageously provides an apparatus and methods of data communication for discretely and compactly communicating data between a heavy duty vehicle and a remote data communication terminal.” Exhibit B, the '203 Patent, col. 2, lines 13-17. The specification describes the first data communication protocol converter as one that “transmits and receives data communications according to the J1708 protocol...” See Exhibit B, the '203 Patent, col. 6, lines 39-43. The specification goes on to define the second communications protocol as an “...infrared or RF data communications protocol which is used to transmit data through the air to a remote data communications terminal. See Exhibit B, the '203 Patent, col. 6, lines 52-54. Defendants’ proposed constructions literally require that the protocol converter convert a first set of rules to a second set of rules and that the transceiver send that second set of rules from the vehicle to

a remote location are not what the summary of invention and specification tells us the patents are about.

As proposed by IGS, one of skill in the art would appreciate that *data* in one *protocol* is converted (*i.e.*, re-encoded) into another *protocol* and then the *data* in the second protocol is transmitted to a remote location. But, this Court need not look to IGS' statements today for this proposition; the Examiner during the prosecution of the Asserted Patents clearly interpreted the claims exactly as IGS purports one of skill in the art would. For example, in an Office Action dated October 4, 1999 during the prosecution of the '299 Patent (the parent of the '203 Patent) the Examiner rejected claims 1-65 over the DiLullo reference, stating that, according to DiLullo "[t]he status signals collected from sensors 38 are transmitted to the IFU 26 by tag 24 via existing electrical system, thus, the status signals [data] would be encoded on to the electrical system by the claimed first protocol. The received data [ ] transmitted out via MST 28 would be certainly converted to another protocol, *i.e.*, the claimed second protocol, in order to be consistent with satellite communication." *See* Exhibit K, p. 3. The Examiner clearly understood the *first data communications protocol* limitations as referring to data encoded in a protocol associated with a vehicle. The Examiner also clearly understood that the data encoded in the first data communications protocol was converted (*i.e.*, re-encoded) to a second protocol for transmitting to a remote location via satellite. The Examiner understood that data was transmitted, not rules as Defendants' proposed constructions would require. IGS' proposal that the terms "*first data communications protocol*" and "*first vehicle data communications protocol*" be construed as "data encoded in a communication protocol associated with the vehicle, for example, J1708 or J1939" comports with how the Examiner believed a person of ordinary skill in the art would interpret these

terms in the context of the claims, *i.e.*, that vehicle data in a first protocol is re-encoded in a second protocol so that the data can be wirelessly transmitted from the vehicle.<sup>6</sup>

IGS' proposed construction includes examples of communication protocol associated with the vehicle, namely J1708 or J1939. These examples are to assist the jury to understand what is meant by "a communication protocol associated with a vehicle." IGS' construction is not limited to these protocols. Support for J1708 or J1939 being examples of a first data communications protocol is found throughout the specifications of the asserted patents. *See, e.g.*, Exhibit B, the '203 Patent, col. 6, lines 32-35 ("As understood by those skilled in the art, the first data communications protocol is preferably according to SAE J1708, but also could be according to SAE J1939 or RS-485. In other words, the first data communications protocol is preferably an existing data communications protocol conventionally associated with the tractor/trailer combination or the heavy duty vehicle 20.").

For these reasons, IGS contends that the terms "*first data communications protocol*" and "*first vehicle data communications protocol*" are properly construed as "data encoded in a communication protocol associated with the vehicle, for example, J1708 or J1939."

**C. "*second data communications protocol*" ['554 Patent (Claims 1,11,12,24,25), '352 Patent (Claims 11,55,56), '993 Patent (Claims 1,5,8,12,15,19)] AND "*second RF communication protocol*" ['203 Patent (Claims 1,11,12,24,25), '554 Patent (Claim 29), '800 Patent (Claims 1,12,13,25,26)] AND "*wireless data communications protocol*" ['993 Patent (Claims 5,12, 19)]**

The parties have agreed that the terms "*second data communications protocol*," "*second RF communication protocol*," and "*wireless data communications protocol*" should be construed together. IGS contends that these terms are properly construed as "data encoded in a [RF]

---

<sup>6</sup> Even a lay person of no particular skill in the art can immediately recognize the problem with Defendants' proposed construction, which requires that one set of rules be converted to another set of rules. Analogizing protocols to languages, one would not describe a Japanese-to-English language converter as a device that converts the rules of Japanese language to the rules of English language. Instead, one would recognize that such a converter

communication protocol suitable for transmission between the vehicle and a remote location whether or not the vehicle is in operation.”<sup>7</sup> Defendants propose the construction “a set of rules governing the treatment and format of wireless communication limited to a close proximity of a vehicle.”

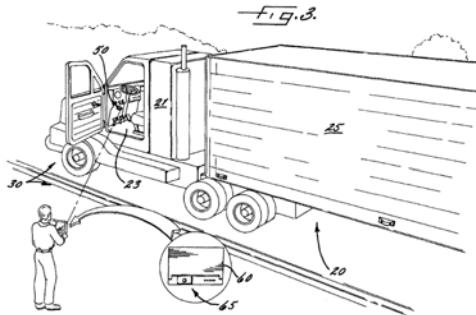
As with their proposed construction of the *first vehicle data communications protocol* terms, Defendants’ construction of the *second/wireless data communications protocol* terms would require that the data communications apparatus transmit “a set of rules” from the vehicle to a remote location and receive a “set of rules” from the remote location. As explained in the previous section, the asserted patents are directed to transmitting data, not to transmitting rules. The specification effectively defines the second data communications protocol as an “...infrared or RF communications protocol which is used to transmit data through the air to a remote data communications terminal. Exhibit B, the ‘203 Patent, col. 6, lines 52-54. Defendants’ proposed construction is therefore defective for this reason.

Also, Defendants’ proposed construction impermissibly limits the claims by including the requirement that the wireless communication is “*limited to a close proximity of a vehicle*.” As discussed in Section II above, the specifications of the asserted patents describe two embodiments, one directed to local-area data communication and the other directed to long distance communication. Figure 3 of the ‘203 Patent illustrates an example of the local area embodiment, where communication is between the vehicle and the persons standing close to the vehicle when the vehicle is out of service:

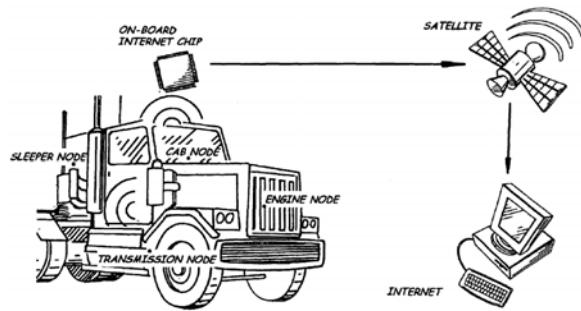
---

converts messages in Japanese into messages in English.

<sup>7</sup> This proposed construction differs slightly from IGS’ construction proposed in the 4-3’s, but is more consistent with the specifications.



Likewise, Figure 26 of the '352 Patent illustrates an example of the long distance embodiment when the vehicle is in operation out on the road:



Importantly, Applicants distinguished between the local-area and the long distance embodiments in the claims of the asserted patents and their related patent applications. For example, the parent of the '203 Patent (the '299 Patent), a NetworkFleet Counterclaim Patent, specifically claims data transmission from the vehicle to a remote location that is in close proximity to the vehicle. That limitation was expressly included in the claims as a “second *local-area* data communications protocol. *See, e.g.*, Exhibit H, '299 Patent, claim 11 (“a transceiver connected to said vehicle data communications protocol converting means for transmitting the second *local-area* data communications protocol from the heavy duty vehicle”) (emphasis added). The Examiner expressly found that “local-area” meant close proximity to the vehicle, “[t]hus the claimed ‘local-area’ data communications has been interpreted as the communications within a close proximity around the vehicle rather than communication occurred in a substantial distance such as long distance RF communication and satellite communications.” *See* Exhibit L, '299 File History, Notice

of Allowance dated January 31, 2000, p. 2. Therefore, in the later Asserted Patents, where the patentee dropped the phrase “local-area” out of the data communications protocol limitation, it clearly broadened that claim to include long distance communication including RF and satellite, as otherwise disclosed in the specifications. Thus, Defendants are attempting to read a limitation from an earlier patent into the Asserted Patents, that the patentee clearly omitted in the Asserted Patents.

In contrast to Defendants’ proposed construction, of “*second data communications protocol, et al.*,” IGS’ proposed construction, “data encoded in a [RF] communication protocol suitable for transmission between the vehicle and a remote location whether or not the vehicle is in operation,” comports with the description in the Asserted Patents showing that the claimed apparatus transmits *data*, not a “*set of rules*.” IGS’ proposed construction also comports with the Applicants’ clear intent as expressed through their choice of claim language. In other words, when Applicants wanted to claim an embodiment limited to a close proximity of a vehicle, they signaled this intent by specifying that the second protocol is a *local-area* data communications protocol. When Applicants did not want the claim to be so limited, they omitted the words *local-area*. The patent specifications clearly support both embodiments and Applicants are free to choose which embodiment to claim in a particular claim. Applicants’ choice should be respected. Thus, IGS urges the Court to adopt its proposed construction of these limitations.

**D. “*vehicle data communications protocol converter*” [‘554 Patent (Claim 11), ‘352 Patent (Claim 11), ‘993 Patent (Claims 1,8)]**

IGS contends that the term “vehicle” has its plain and ordinary meaning and that “data communications protocol converter” should be construed as “a device that converts data encoded in one protocol into data encoded in another protocol.” Defendants propose the construction “a device capable of converting one set of rules governing the treatment and format of vehicle data

communications to another set of rules governing the treatment and format of vehicle data communications.”

This claim terms, like all claim terms, should be construed in light of the specification. As described above, Defendants’ proposed construction literally requires that the protocol converter convert a first set of rules into a second set of rules. But, one of skill in the art would immediately recognize, both from the context of the claim language and from the patent specifications, that the claims are not directed to converting rules, but instead are about converting *data* in one *protocol* into another *protocol* and so that the *data* in the second protocol can be transmitted to a remote location.

The patent specifications are clear that data in a first protocol is converted to data in a second protocol so that the data in the second protocol can be transmitted from the vehicle to a remote location. For example, the ‘203 Patent states, “The present invention also advantageously provides an apparatus and methods of *data communication* for discretely and compactly communicating *data* between a heavy duty vehicle and a remote data communication terminal.” Exhibit B, the ‘203 Patent, col. 2, lines 13-17. The data is produced by an electronic subsystem of the vehicle and is transmitted on a plurality of electrical conductors on the vehicle. The specification specifically states that it is “...data conversion from one data communications protocol to another data communications protocol...” *See* Exhibit B, the ‘203 Patent, col. 9, lines 33-35. As shown above, the conversion is into an RF communications protocol used to transmit data through the air. *See* Exhibit B, the ‘203 Patent, col. 6, lines 52-54. The first data communications protocol being converted is preferably an existing protocol associated with the vehicle subsystems, such as “data communications according to the J1708 protocol.” *See* ‘203 Patent, col. 6, lines 35-43. The specification is clear that the purpose of the invention is to transmit data that is generated by an electrical subsystem of the vehicle to a remote location, not to transmit rules from the vehicle to a remote location.

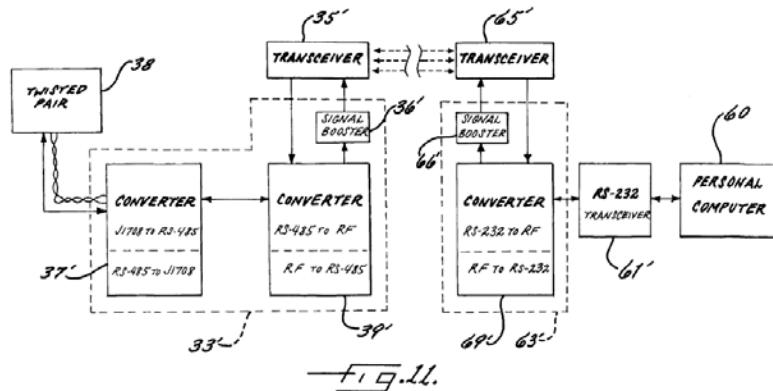
Again, the Patent Examiner understood that concept precisely, stating in an Office Action dated October 4, 1999 during the prosecution of the ‘299 Patent (the parent of the ‘203 Patent) “[t]he status signals collected from sensors 38 are transmitted to the IFU 26 by tag 24 via existing electrical system, thus, the status signals [data] would be encoded on to the electrical system by the claimed first protocol. The received data [ ] transmitted out via MST 28 would be certainly converted to another protocol, *i.e.*, the claimed second protocol, in order to be consistent with satellite communication.” *See Exhibit K, p. 3.* But, in order to transmit the data from the vehicle to the remote location the data must first be re-encoded from a first protocol used on the plurality of electrical conductors on the vehicle into a second protocol suitable for wirelessly transmitting to a remote location. IGS’ proposed construction complies with the description in the Asserted Patents and should be adopted.

**E. “*vehicle data communications protocol converting means*” [‘203 Patent (Claims 1, 11), ‘554 Patent (Claim 1), ‘800 Patent (Claims 1,12)]**

IGS believes that “vehicle” has its plain and ordinary meaning and that “data communications protocol converting means” is properly construed as “a circuit or microprocessor that converts data encoded in one protocol into data encoded in another protocol and structural equivalents thereof.” Defendants propose the construction “a device capable of converting one set of rules governing the treatment and format of vehicle data communications to another set of rules governing the treatment and format of vehicle data communications.” All parties agree that this limitation is governed by 35 U.S.C. § 112(6).

The correct construction of this means-plus-function limitation requires identification of the structure in the specification(s) corresponding to the claimed function of “converting data in the first protocol into a second protocol.” *See Budde v. Harley-Davidson, Inc.*, 250 F.3d at 1369, 1376 (Fed. Cir. 2001). Structure corresponding to this function is found throughout the specifications. For

example, Fig. 11 of the '203 Patent illustrates a communications apparatus including data communications protocol converting means 33:'



See also Exhibit B, the '203 Patent, description of Fig. 11 at col. 6, lines 22-62. The embodiment of a communications data protocol converting means 33' illustrated in Fig. 11 includes a first protocol converter 37 that converts data in a communications protocol associated with the vehicle (J1708 in this example) to a different protocol (RS-485). *Id.* at col. 6, lines 35-54. The communications data protocol converting means includes a second protocol converter 39' that converts data in RS-485 to an RF protocol. *Id.* and col. 7, lines 20-30. Specifically, the '203 specification states that the protocol converter 39' is "an RF data communications integrated circuit or analog circuit as understood by those skilled in the art which receives and transmits logic levels to a microprocessor or microcontroller and transmits and receives RF data communications according to predetermined RF data communications protocol." *Id.* at col. 7, lines 20-30. Defendants' proposed construction still includes the unsupported requirement that the vehicle and the remote location transmit "rules" back and forth to each other. IGS' proposed construction, "a circuit or microprocessor that converts data encoded in one protocol into data encoded in another protocol and structural equivalents thereof," captures the structure disclosed in the specification for performing the stated function and also captures the statutorily prescribed equivalents. Defendants' proposed construction should be rejected and IGS' adopted.

**F. “*convert/converting*” [‘203 Patent (Claims 1, 11, 24), ‘554 Patent (Claims 1, 11, 24), ‘352 Patent (Claims 11, 55), ‘800 Patent (Claims 1, 12, 25), ‘993 Patent (Claims 1, 8, 15)]**

IGS believes that construing “*convert/converting*” would not be helpful to a jury. This is a straight forward verb that is not used in any unusual or limiting way in the claims. Defendants nonetheless propose the construction “a reversible transformation of the entirety of the subject of transformation.” (Emphasis added). So, not only rendering a simple term that we all understand incomprehensible (reversible transformation??), Defendants are trying to require that converting requires converting the entirety of something. If the term was the verb paint/painting, Defendants’ construction would mean that when one says they are painting their house, that means every square inch of their house[the entirety], not just the outside wooden walls. That is not how we all speak.

If additional information is necessary in a construction to define the term under the Asserted Patents, IGS believes that one of skill in the art would understand this term to mean “re-encoding data in one protocol to another protocol,” since that is the context in which those terms are used.

Claim 11 of the ‘203 Patent provides an example of how *converting* is used in the claims:

11. An apparatus for data communications associated with a vehicle, the apparatus comprising:

\* \* \*

vehicle data communications protocol converting means connected to said plurality of electrical conductors for *converting* a first data communications protocol associated with data communications along the plurality of electrical conductors to a second RF data communications protocol; and

\* \* \*

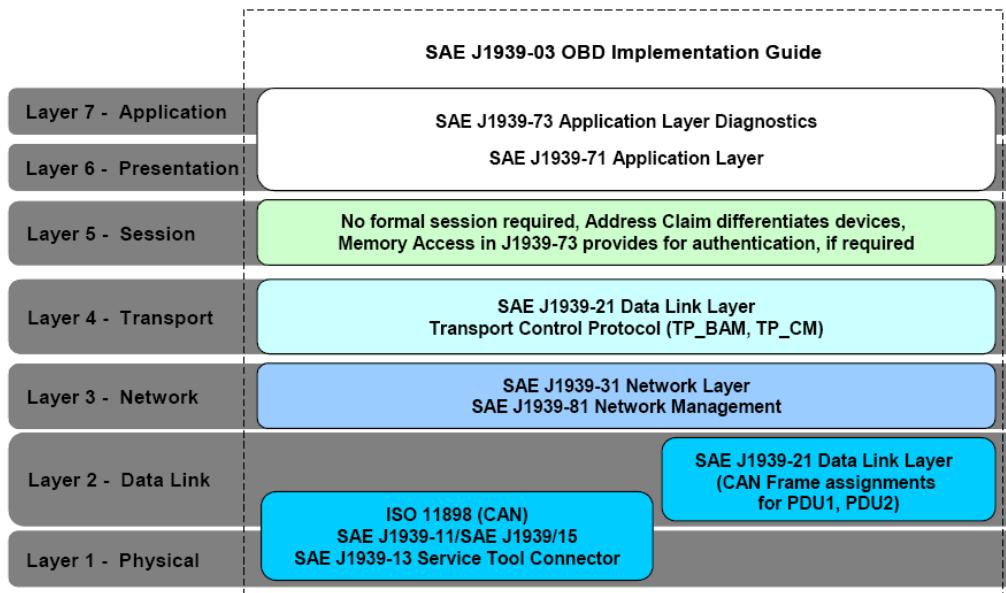
Clearly, the terms “convert/converting” are used throughout the asserted patents in the context of converting data in one protocol into data of another protocol.<sup>8</sup> As explained above, the specification clearly teaches that converting data in a first protocol to another protocol means re-

---

<sup>8</sup> The specification never discusses converting all data. The converter is being provided access to all data on the

encoding the data from the first protocol into the second protocol. This is certainly how the Examiner of the parent application to the asserted patents understood the terms. For example, in an Office Action dated October 4, 1999 during the prosecution of the ‘299 Patent (the parent of the ‘203 Patent), the Examiner rejected claims 1-65 over the DiLullo reference, stating that, according to DiLullo “The status signals collected from sensors 38 are transmitted to the IFU 26 by tag 24 via existing electrical system, thus, the status signals would be *encoded* on to the electrical system by the claimed first protocol. The received data [ ] transmitted out via MST 28 would be *certainly converted to another protocol*, i.e., the claimed second protocol, in order to be consistent with satellite communication.” *See* Exhibit K, p. 3 (emphasis added).

Defendants’ proposed construction impermissibly adds the terms “the entirety of the subject of transformation.” In addition to being unwieldy and confusing, this term is entirely unsupported by the intrinsic and extrinsic evidence. As explained in Section II, communication protocols such as J1939 are layered. A schematic representation of the J1939 protocol is illustrated below:<sup>9</sup>



data bus as shown in Table 1, but only certain data may be selected for conversion and transmission off the vehicle.

<sup>9</sup> *See* Exhibit O, Surface Vehicle Recommended Practice, On Board Diagnostics Implementation Guide,

The Application Layer (layer 7) includes data relating to diagnostics and control applications, for example, engine speed.<sup>10</sup> Transport Layer (layer 4) includes information about how the various components send messages to each other. A single data packet in J1939 protocol will contain information defined by each of these layers. As described in Section II above, some or all of these layers can be changed to facilitate communicating information through different mediums. Another analogy for understanding how the layers of a communications protocol relate to each other is like a set of Russian stacking dolls, where one wooden doll is contained within another and those two within another, etc.

By including the terms “the entirety of the subject of transformation” into their proposed construction of “convert/converting,” Defendants imply that the entirety of data of each data packet relating to each of the protocol layers must somehow be “transformed.” But, one of skill in the art would understand that this might not be the case. The specification discusses the fact that in a preferred embodiment the second data communications protocol only uses the physical layer and not a data link layer so that data conversion from one data communication protocol to another data communications protocol is simplified. Exhibit B, the ‘203 Patent, col. 9, lines 26-35. Therefore, the patents are clear that not all layers, the physical, data link, and/or transport layers, need be re-encoded. In a preferred embodiment, only the physical layer is re-encoded.

As stated above, IGS believes that construing “*convert/converting*” would not be helpful to a jury. But, if these terms are construed, IGS believes that one of skill in the art would understand this term to mean “re-encoding data in one protocol to another protocol.”

**G. “*transceiver*” [‘203 Patent (Claims 1,11), ‘554 Patent (Claims 1,11, 12), ‘800 Patent (Claim 1,12), ‘352 Patent (Claim 11)]**

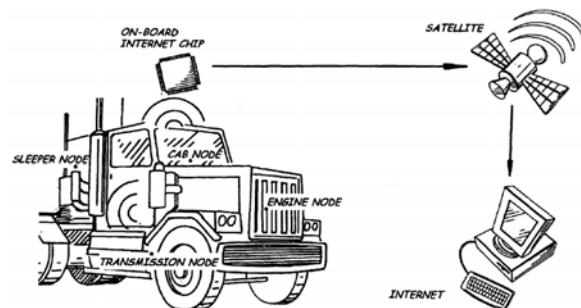
---

IGS014623-69.

<sup>10</sup> See Exhibit O, IGS014633.

IGS believes that construing the term “transceiver” would not be helpful to a jury. However, if this claim is to be construed, IGS believes that the plain and ordinary meaning of “transceiver” is “a device that transmits and receives;” in fact the word transceiver is simply a combination of trans(~~mitter~~) and(~~re~~ceive)r Defendants propose the construction “a device that transmits and receives wireless communications limited to a close proximity of a vehicle.”

Again, Defendants are trying to impermissibly limit the scope of the claims including “limited to a close proximity of a vehicle” in their proposed construction of this term. As explained in the previous section, the specification describes both infra-red (IR) and radio frequency (RF) transceivers. *See, e.g.*, Exhibit B, the ‘203 Patent, col. 6, line 63 – col. 7, line 12 and Fig. 5 (*describing* an IR transceiver) *and* col. 7, lines 20-30 and Fig. 11 (*describing* RF transceiver). If the transmission is by IR, then the remote data communications terminal is necessarily limited to a close proximity of the vehicle due to the operational limitations of IR transmission.<sup>11</sup> But, if the transmission is by RF, then there is no such proximity limitation. As illustrated in Figure 26 of the ‘352 Patent, long distance transmission while the vehicle is in operation is clearly contemplated in the specifications:



It is no doubt apparent to the Court that Defendants are trying to win a non-infringement argument at the claim construction phase by impermissibly limiting the scope of the invention to communications within a close proximity of a vehicle. In furtherance of this agenda, Defendants are

trying to shoehorn the local area limitation into as many claim terms as possible in hopes that one of them sticks. But, the fact is that the Asserted Patents include both local area communication and long distance communication as embodiments. IGS is not asserting claims limited to “local area” in this lawsuit, but Defendants are asking the Court to re-write the specification, the claims, and Applicants’ clear intent by limiting all of the claims to local area communications. IGS knew how to use the term “local-area” in its later-filed claims as it did in the early patents and did not use that term associated with the transceiver in the Asserted Patents.

As noted, IGS does not believe a construction is needed for the term “transceiver,” as the word is simply a combination of the words “transmitter” and “receiver,” which IGS believes a jury can understand. However, if the Court believes that a construction would help the jury, then IGS proposes “a device that transmits and receives.” This construction comports with the specifications. *See, e.g.*, Exhibit B, the ‘203 Patent, col. 3, lines 32-38 (“A transceiver is preferably positioned within the transceiver housing and is connected to the vehicle data communications protocol converting means for *transmitting* the second data communications protocol from the heavy duty vehicle and *receiving* the data communications protocol from a remote data communications terminal.”). IGS’ proposed definition also comports with how the term transceiver is generally understood to one of skill in the art. *See, e.g.*, Exhibit M, Merriam-Webster Ninth New Collegiate Dictionary, 1252 (1991) (“transceiver: a radio transmitter-receiver that uses many of the same components for both transmission and reception”). Thus, while IGS believes that no construction of the term “transceiver” is necessary, if a construction is adopted, it should be simply “a device that transmits and receives.”

**H. “*remote data communications terminal*” [‘203 Patent (Claims 1,11,12,24,25), ‘554 Patent (Claims 1,11,12,24,25), ‘352 Patent (Claims 11,55,56)]**

---

<sup>11</sup> Claims specific to IR transmission are not asserted in this suit.

IGS contends that “*remote data communications terminal*” is properly construed as “data communications terminal that is remote from vehicle whether or not the vehicle is in operation.”<sup>12</sup> Defendants propose the construction “a data collection station for receiving and transmitting wireless communications limited to a close proximity of a vehicle.”

IGS apologizes for sounding like a broken record, but again Defendants are trying to impermissibly limit the scope of the claims by gratuitously throwing in a limitation of “limited to close proximity of a vehicle.” IGS will not repeat the arguments from the prior sections on this point.

In contrast, IGS’ proposed construction is in complete agreement with the specification. The specification states that the remote data communications terminal is used to “monitor[] vehicle operational conditions.” *See Exhibit B*, the ‘203 Patent, col. 7, lines 15-20. The specification discusses sending the data over the air and using a signal booster when using RF on the transmitter to increase the range of transmission. *Id.* at col. 7, lines 31-38. The remote data communications terminal is therefore necessarily in communication with the vehicle whether the vehicle is out of operation at the service bay or in operation out on the road. Thus, IGS urges the Court to adopt its proposed construction of this limitation.

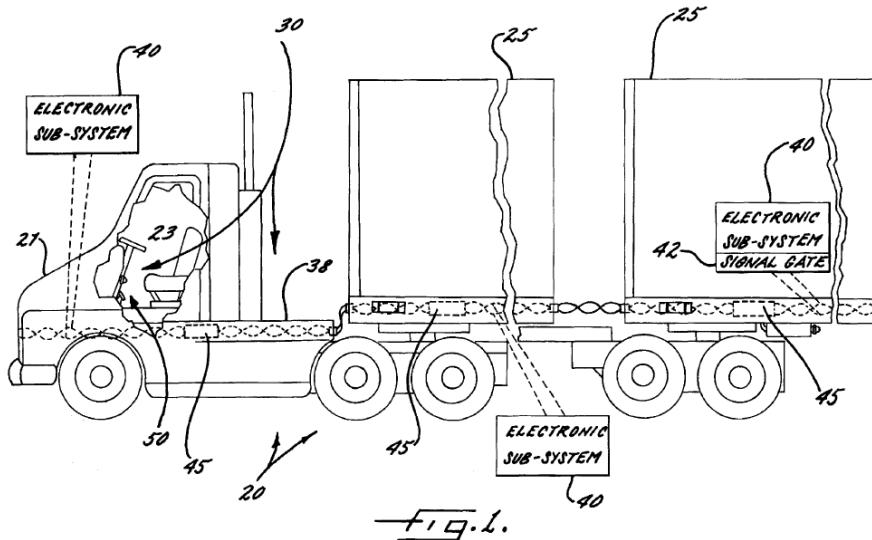
**I. “*connected [to]*” [‘203 Patent (Claims 1,8,11,12,24), ‘554 Patent (Claims 1,7,8,11,12,14), ‘352 Patent (Claims 12,17), ‘800 Patent (Claims 1,11,12,13,15), ‘993 Patent (Claims 1, 2, 8, 9)]**

IGS believes that “connected” and “connected to” are properly construed as “linked together physically, communicatively electrically, or logically.” NetworkFleet proposes that these terms be construed as “directly linked to.” Cadec proposes that “connected to” be construed as “directly, physically linked to” and has not offered a construction of “connected.”

---

<sup>12</sup> This construction differs slightly from the construction IGS proposed in its 4-3’s but more closely comports with

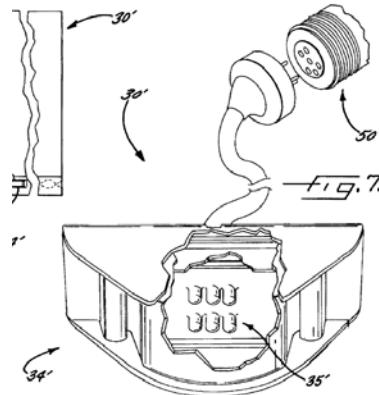
Defendants' proposed constructions, by including the terms "directly" and/or "directly physically" would confuse a jury. For example, components that are connected via an intervening cable or an intervening connector would presumably not be considered "directly [physically] linked" by Defendants. The specifications of the Asserted Patents clearly use the term connected to refer to components that are linked by intervening conductors. For example, describing Fig. 1, the '203 Patent states: "The connector 50 can also be *connected to* one or more of the electronic subsystems 40, *e.g.*, an ABS system, *preferably through the electrical conductors 38.*" Exhibit B, the '203 Patent, col. 7, lines 54-56 (emphasis added).



Likewise, Fig. 7 of the '203 Patent is reproduced below:

---

the specification.



Describing Fig. 7, the specification states that transceiver 35[‘] is positioned in transceiver housing 34’ and *connected* to the vehicle data communications protocol converting means 33, which is not pictured in Fig. 7. Exhibit B, the ‘203 Patent, col. 8, lines 64-66. This means that transceiver 35 is connected to protocol converting means via intervening connector 50. But, the illustrated embodiment would apparently not be covered by Defendants’ proposed construction, which requires connected to mean directly and/or directly physically linked, even though the specification distinctly states that the transceiver and the vehicle data protocol converting means are connected. In contrast, IGS’ proposed construction, “linked together physically, communicatively, electrically, or logically,” captures this embodiment along with the other embodiments described in the specification, because IGS’ definition includes communicative, electrical, and logical connections, as illustrated in Figs. 1 and 7. Likewise, there is nothing inherent in the plain and ordinary meaning of the term “connected [to]” that implies that the connection must be direct and physical.<sup>13</sup> Defendants are gratuitously reading these limitations into their proposed construction. IGS therefore urges the Court to reject Defendants’ proposed construction and adopt IGS’ proposed construction “linked together physically, communicatively electrically, or logically.”

<sup>13</sup> See, e.g., WEBSTER’S NEW UNABRIDGED DICTIONARY, “connect: 1. To join, link, or fasten together; unite or bind: *to connect the two cities by a bridge; Communication satellites connect the local stations into a network* 2. To establish communication between; put into communication; connected: 1. United, joined, or linked.” (Exhibit N, IGS011224). See, also WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY; “connected: 1.

**J. “operatively connect[ed][ing]” [‘993 Patent (Claims 2,9,16)]**

IGS believes that construing this term would not be helpful to a jury. However, if this claim is to be construed, IGS believes that “operatively connected” should be construed as “linked together in such a way that operation of one can affect the other.” Defendants propose the construction “electronically linked, directly or indirectly.”

“Operatively connected” in patent claims generally means the claimed components are connected in a way to perform their designated function. *See, e.g., Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1118 (Fed. Cir. 2004). The claim terms “operatively connect[ed][ing]” are used exclusively in the ‘993 Patent and exclusively to describe the connection of a plurality of electrical conductors to at least one electronic subsystem of a vehicle. In this context, and only in this context, IGS finds Defendants’ proposed construction acceptable and therefore agrees with their proposed construction. The construction of “operatively connect[ed][ing]” in this narrow instance in these three claims has no impact on any other claims in this patent or any other of the Asserted Patents.

**K. “connector” [‘203 Patent (Claim 1 and throughout), ‘554 Patent (Claim 1 and throughout), ‘352 Patent (Claim 12), ‘800 Patent (Claim 1 and throughout)]**

IGS believes that construing this term would not be helpful to a jury. However, if this claim is to be construed, IGS believes that the plain and ordinary meaning of “connector” is “device through which devices are connected.” Defendants propose that “connector” be construed as “an instrumentality for electronically linking two or more components.”

The meaning of connector is abundantly clear; a jury would not benefit from a construction of this term. By their proposed construction, Defendants do not seek to clarify the term, but instead seek to include additional limitations into the term, namely, the requirement that the connector

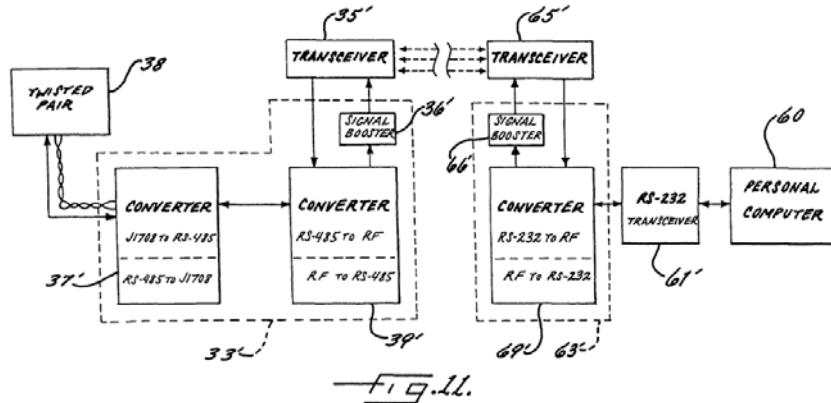
---

Joined or linked together 2. Having the parts or elements logically linked together.” (Exhibit M, IGS011228).

*electronically* link two or more components. But there is simply no reason to burden this very simple term with the requirement of “electronically.” Connectors traditionally connect physically, electrically, or otherwise. The Asserted Patents use the term connector consistent with this common meaning. *See Exhibit B*, the ‘203 Patent, col. 8, lines 2-4 (“This further takes advantage of existing positions of vehicle connectors to tap into or access the plurality of electrical conductors 38 which provide data or information . . .”). The specification further discusses connector portions that mate through a frictional fit. *Id.* at col. 8, lines 23-25. Therefore a connector construction limited to only electronically linking doesn’t comport with the specification. IGS argues that connector be defined a “a device through which devices are connected.”

**L. “means connected to said vehicle data communications protocol converter for transmitting the second data communications protocol from said vehicle, and for receiving the second data communications protocol from a remote data communications terminal” [‘993 Patent (Claims 1, 8)]**

Each of the parties agree that this term is governed by § 112(6). The function recited for this term is, “transmitting the second data communications protocol from the vehicle and receiving the second data communications protocol from a remote data communications terminal.” The structure identified in the ‘993 Patent for performing this function is a transceiver. *See Exhibit F*, col. 12, lines 35-40. (“A transceiver 35 is preferably positioned within the transceiver housing 34, 34' and connected to the vehicle data communications protocol converting means 33 for transmitting the second data communications protocol from the vehicle 20 and receiving the data communications protocol from a remote data communications terminal 60.”) (emphasis added). The ‘993 Patent discloses IR transceivers and RF transceivers. *See, e.g.*, Exhibit B, the ‘203 Patent, col. 12, lines 46-52. Only RF transceivers are asserted in this law suit. A RF transceiver is shown as element 35’ in Fig. 11:



The '993 Patent discusses preferred embodiments of transceivers. For example, Exhibit F, at col. 12, lines 46-52 states, "the transceiver 35 is preferably only a physical layer signal processing transceiver, *e.g.*, infrared or radio frequency, and preferably includes a combination transmitter and receiver which collects data or information from the various subsystems and communicates the data to one or more remote data communications terminals 60." But, it should be noted that this claim element is not limited to the preferred embodiment. *See, e.g., Vulcan Eng'g Co. v. FATA Aluminium, Inc.*, 278 F.3d 1366, 1376 (Fed. Cir. 2002) ("When the claims include means-plus-function terms in accordance with § 112 P 6, claim scope necessarily is not limited to the preferred embodiments, but includes equivalents thereof."). Indeed, the '993 Patent states, "It will be understood by those skilled in the art that the apparatus is not limited to communication by a physical layer signal processing transceiver, but that other communication protocol techniques can be used as well." Exhibit F, col. 12, lines 52-56. The specification discusses integrated circuits and controllers used in association with analog transmitter/receiver components that permit transmission and allow receipt of the various layers of signals. *See Exhibit B, the '203 Patent, col. 7, lines 19-30.*

Thus, while the preferred embodiment disclosed in the '993 Patent is a physical layer signal processing transceiver, one of skill in the art would understand that any combination RF transmitter and receiver would meet this claim element. *See, e.g., Exhibit M, Merriam-Webster Ninth New*

Collegiate Dictionary, 1252 (1991) (“transceiver: a radio transmitter-receiver that uses many of the same components for both transmission and reception”).

**M. “heavy duty vehicle” [‘203 Patent (*Claims 1, 24*), ‘352 Patent (*Claim 17*), ‘800 Patent (*Claim1*)]**

IGS contends that the plain and ordinary meaning of “heavy duty vehicle” is clear to all and needs no further clarification for the jury. Defendants contend that this term should be construed as “a tractor and a connected trailer.” But, Defendants’ proposed construction contradicts the specifications. For example, while the specification of the ‘203 Patent states that a tractor/trailer combination is an embodiment of the invention,<sup>14</sup> the specification also states “It will also be understood by those skilled in the art that other types of heavy duty vehicles, such as a recreational vehicle, agricultural tractors or other heavy duty vehicles used in association with agricultural uses, can also be used according to the present invention.” Exhibit B, the ‘203 Patent, col. 5, lines 8-13. So, the specification clearly teaches that the term “heavy duty vehicle” is broader than Defendants’ proposed construction. Also, claim 1 of the ‘203 Patent recites, “A heavy duty vehicle comprising: a tractor and a trailer connected thereto.” *Id.* at claim 1. Defining the term “heavy duty vehicle” as “a tractor and a connected trailer” would render the explicit recitation of a tractor and a trailer in this claim redundant; the claim would read, “A a tractor and a connected trailer comprising: a tractor and a trailer connected thereto.”

Furthermore, Defendants’ proposed construction is confusing because it includes the concept of “connected.” Would a heavy duty vehicle cease to be a heavy duty vehicle when the tractor is disconnected from the trailer? The Court’s claim construction should clarify issues for the jury, not confuse them.

Indeed, a jury would not be confused by the term “heavy duty vehicle.” But, should the

Court decide that a construction is necessary, IGS proposes that the term be defined in the same way that it is defined in rules and regulations directed to heavy duty vehicles. For example, 40 C.F.R. § 86.082-2, which defines terms relating to the Environmental Protection Agency's regulation of emissions in *enter alia*, heavy duty vehicles, defines a heavy duty vehicle as "a vehicle having a gross vehicle weight rating of greater than 8500 pounds, or curb weight of more than 6000 pounds." 40 C.F.R. § 86.082-2. IGS proposes that this definition be adopted as the construction of the term "heavy duty vehicle" because this definition is precise and would not confuse a jury.

**N. *"a vehicle data communications protocol converter connected to said plurality of electrical conductors"* ['554 Patent (Claim 11), '993 Patent (Claims 1, 8, 11), '352 Patent (Claim 1, 11)]**

Defendants identified this term as a term governed by 35 U.S.C. § 112(6). IGS disagrees. This term does not even use the word "means."<sup>14</sup> IGS is actually at a loss on this one. The parties have all agreed that "a vehicle data communications protocol converter" is not a means plus function element. *See* Section IV.D above. IGS does not understand how saying that something that is not means plus function limitation becomes a means plus function limitation simply by saying it is "connected to said plurality of electrical conductors."

Defendants must show that the claim, as properly construed, fails to recite sufficiently definite structure to avoid invoking § 112(6) to rebut this presumption. *Id.* at 704. The fact that a particular mechanism is defined in functional terms is not sufficient to invoke § 112(6). *Id.* at 703, *citing Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, (Fed. Cir. 1996). As noted by the Court of Appeals for the Federal Circuit, many devices take their names from the functions they perform, such as "filter," "brake," "clamp," "screwdriver," or "lock." *Personalized Media*, 161 F.3d

<sup>14</sup> Exhibit B, the '203 Patent, col. 4. Line 64- col. 5, line 3.

<sup>15</sup> When the word "means" is not used in a claim limitation there is a presumption that § 112(6) does not apply. *See, e.g., Personalized Media Communs., L.L.C. v. ITC*, 161 F.3d 696, 703-4 (Fed. Cir. 1998). In *Personalized Media* the Court of Appeals for the Federal Circuit found that the ITC erred in construing the term "digital detector" as a

at 703. Examples of devices taking their names from the functions they perform in the communications and electronics arts are also numerous. Examples include “processor,” “digital-to-analog converter,” “router,” and the like. Likewise, the fact that “protocol converter” takes its name from the function it performs does not rebut the presumption that this limitation is not a means-plus-function limitation.<sup>16</sup> Furthermore, Applicants clearly understood that means-plus-function language invokes § 112(6), as evidenced by their choosing to specifically use means-plus-function limitations for many of the claims of the asserted patents. When Applicants did not intend to invoke § 112(6), they did not use means-plus-function language. Applicants’ intent should be respected and this claim should not be construed according to § 112(6).

If the Court determines that this claim term is governed by § 112(6), then IGS believes that only the “vehicle data communications protocol converter” portion of this term should be construed under § 112(6). The additional words Defendants ask for, “connected to said plurality of conductors,” are not even arguably functional in nature and therefore should not form a part of the claim term construed under § 112(6).

If “vehicle data communications protocol converter” is to be construed under § 112(6), IGS believes that it has the same construction as “vehicle data communications protocol converting means,” which is discussed in Section IV.D above. Namely, this claim would be construed under § 112(6), as “a circuit or microprocessor that converts data encoded in one protocol into data encoded in another protocol, and structural equivalents thereof” for the reasons explained in Section IV.D.

---

means-plus-function limitation. *Id.* at 704.

<sup>16</sup> Both IGS and Defendants have offered constructions for the term “vehicle data communications protocol converter,” and no party has alleged that this term is governed by § 112(6). *See* Section IV.D, above. There is no reason that adding “connected to said plurality of electrical conductors” should convert this term into a means-plus-function term.

**V. CONCLUSION**

For the aforementioned reasons, it is respectfully requested that the Court adopt IGS' proposed construction of the various terms set forth above.

Respectfully submitted,

DATED: April 2, 2010

By: /s/ Keith A. Rutherford

Michael T. Cooke  
State Bar No. 04759650  
Jonathan T. Suder  
State Bar No. 19463350  
FRIEDMAN, SUDER & COOKE  
Tindall Square Warehouse No. 1  
604 East 4th Street, Suite 200  
Fort Worth, Texas 76102  
(817) 334-0400  
Fax (817) 334-0401  
[jts@fsclaw.com](mailto:jts@fsclaw.com)  
[mtc@fsclaw.com](mailto:mtc@fsclaw.com)

Keith A. Rutherford  
State Bar No. 17452000  
R. Scott Reese  
State Bar No. 24046696  
Sarah R. Cabello  
State Bar No. 24052877  
WONG, CABELLO, LUTSCH,  
RUTHERFORD & BRUCCULERI, LLP  
20333 SH 249, Suite 600  
Houston, TX 77070  
(832) 446-2400  
Fax (832) 446-2424  
[krutherford@counselip.com](mailto:krutherford@counselip.com)  
[sreese@counselip.com](mailto:sreese@counselip.com)  
[scabello@counselip.com](mailto:scabello@counselip.com)

Eric M. Albritton  
ERIC M. ALBRITTON, P.C.  
P.O. Box 2649  
111 West Tyler Street  
Longview, TX 75601  
(903) 757-8449 x204  
Fax (903) 758-7397  
[ema@emafirm.com](mailto:ema@emafirm.com)

ATTORNEYS FOR PLAINTIFF  
INNOVATIVE GLOBAL SYSTEMS, LLC

**CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served today, April 2, 2010, with a copy of the foregoing via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by electronic mail, facsimile transmission and/or first class mail on this same date.

/s/ Sarah R. Cabello  
Sarah R. Cabello